Panasonic

Operating Instructions

Blu-ray Disc™ Player

Model No. DMP-BDT271
DMP-BDT270
DMP-BDT175
DMP-BDT174
DMP-BDT171
DMP-BDT170
DMP-BDT166
DMP-BDT165
DMP-BD833
DMP-BD83

Unless otherwise indicated, illustrations in these operating instructions are of DMP-BDT271.

Firmware updates

Panasonic is constantly improving the unit's firmware to ensure that our customers are enjoying the latest technology.
Panasonic recommends updating your firmware as soon as you are notified.
For details, refer to "Firmware updates" (⇨ 14) or http://panasonic.jp/support/global/cs/ (This site is in English only.)

Thank you for purchasing this product.
Please read these instructions carefully before using this product, and save this manual for future use.

EG

SQW0277

Precautions

WARNING

Unit
To reduce the risk of fire, electric shock or product damage,
- Do not expose this unit to rain, moisture, dripping or splashing.
- Do not place objects filled with liquids, such as vases, on this unit.
- Use only the recommended accessories.
- Do not remove covers.
- Do not repair this unit by yourself. Refer servicing to qualified service personnel.
- Do not let metal objects fall inside this unit.
- Do not place heavy items on this unit.

AC mains lead
To reduce the risk of fire, electric shock or product damage,
- Ensure that the power supply voltage corresponds to the voltage printed on this unit.
- Insert the mains plug fully into the socket outlet.
- Do not pull, bend, or place heavy items on the lead.
- Do not handle the plug with wet hands.
- Hold onto the mains plug body when disconnecting the plug.
- Do not use a damaged mains plug or socket outlet.

The mains plug is the disconnecting device.
Install this unit so that the mains plug can be unplugged from the socket outlet immediately.

CAUTION

Unit
- This unit utilizes a laser. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- Do not place sources of naked flames, such as lighted candles, on this unit.
- This unit may receive radio interference caused by mobile telephones during use. If such interference occurs, please increase separation between this unit and the mobile telephone.
- This unit is intended for use in moderate climates.

Placement
Place this unit on an even surface.

To reduce the risk of fire, electric shock or product damage,
- Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure this unit is well ventilated.
- Do not obstruct this unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.
- Do not place the unit on amplifiers/receivers or equipment that may become hot. The heat can damage the unit.
- Do not expose this unit to direct sunlight, high temperatures, high humidity, and excessive vibration.

Batteries
Mishandling of batteries can cause electrolyte leakage and may cause a fire.
- Danger of explosion if battery is incorrectly replaced. Replace only with the type recommended by the manufacturer.
- When disposing of the batteries, please contact your local authorities or dealer and ask for the correct method of disposal.
- Do not mix old and new batteries or different types at the same time.
- Do not heat or expose to flame.
- Do not leave the battery(ies) in a car exposed to direct sunlight for a long period of time with doors and windows closed.
- Do not take apart or short circuit.
- Do not recharge alkaline or manganese batteries.
- Do not use batteries if the covering has been peeled off.

Remove batteries if you do not intend to use the remote control for a long period of time. Store in a cool, dark place.

BDT166/165 **BD833/83**
AC adaptor
The AC adaptor operates on AC between 110 V and 240 V.
But obtain a suitable plug adaptor if the plug does not fit the AC mains socket.

Restriction on use of unauthorized copied content

This unit adopts the following technology for copyright protection.
Cinavia Notice
This product uses Cinavia technology to limit the use of unauthorized copies of some commercially-produced film and videos and their soundtracks. When a prohibited use of an unauthorized copy is detected, a message will be displayed and playback or copying will be interrupted.
More information about Cinavia technology is provided at the Cinavia Online Consumer Information Center at http://www.cinavia.com. To request additional information about Cinavia by mail, send a postcard with your mailing address to: Cinavia Consumer Information Center, P.O. Box 86851, San Diego, CA, 92138, USA.

BDT271/270

Wireless LAN connection

The following limits are in place regarding the usage of this unit. You must be aware of these limits before using this unit. Panasonic will in no way be responsible for any incidental damage which may arise due to a failure to obey these limits, or to any condition of use or disuse of this unit.

- **Data transmitted and received over radio waves may be intercepted and monitored.**
- **This unit contains delicate electronic components.** Please use this unit in the manner in which it was intended and follow the following points:
  - Do not expose this unit to high temperatures or direct sunlight.
  - Do not bend, or subject this unit to strong impacts.
  - Keep this unit away from moisture.
  - Do not disassemble or alter this unit in any way.

CE 1731

Declaration of Conformity (DoC)
Hereby, "*Panasonic Corporation*" declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Customers can download a copy of the original DoC to our R&TTE products from our DoC server:
http://www.doc.panasonic.de
Contact to Authorised Representative:
Panasonic Marketing Europe GmbH, Panasonic Testing Centre, Winsbergring 15, 22525 Hamburg, Germany
This product is intended for general consumer. (Category 3)
This product on purpose to connect to access point of 2.4 GHz WLAN.

To dispose or transfer this unit

The unit may keep the user settings information in the unit. If you discard this unit either by disposal or transfer, then follow the procedure to return all the settings to the factory presets to delete the user settings. (⇨ 30, "To return all settings to the factory preset.")

- The operation history may be recorded in the memory of this unit.

Disposal of Old Equipment and Batteries Only for European Union and countries with recycling systems

These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries must not be mixed with general household waste.
For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points in accordance with your national legislation.
By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment.
For more information about collection and recycling, please contact your local municipality.
Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

Note for the battery symbol (bottom symbol):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

Table of contents

Precautions 2

Getting started

Accessories 5
Unit and media care 5
Playable media 6
Control reference guide 8

Connections and settings

Connecting to a TV 10
Connecting to an amplifier/ receiver 11
Connecting to the network 12
Settings 13

Playback

Inserting or removing media 15
HOME menu 16
Playback 17
Enjoying Network Service 19
Home Network feature 20
“HDMI CEC” 22

Settings

Option menu 23
Setup menu 25

Reference

Troubleshooting guide 30
Specifications 34

Accessories

Check the supplied accessories before using this unit.

1 Remote control

BDT271/270
(N2QAYB001031)
BDT175/174/171/170
(N2QAYB001030)
BDT166/165 BD833/83
(N2QAYB001029)

2 Batteries for remote control

BDT271/270 BDT175/174/171/170

1 AC mains lead

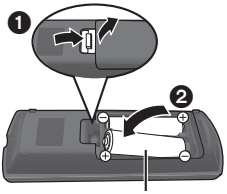
BDT166/165 BD833/83

1 AC adaptor

- Product numbers are provided in these operating instructions correct as of January 2015. These may be subject to change.
- Do not use AC mains lead and AC adaptor with other equipment.
- Do not use any other AC mains lead and AC adaptors except the supplied one.

■ Using the remote control

Insert the batteries to the terminal so that it (+ and −) matches those in the remote control.



R6/LR6, AA
(Alkaline or manganese batteries)

Point it at the remote control signal sensor on this unit. (⇨ 9)

Unit and media care

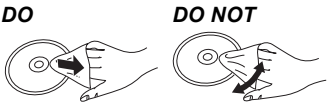
■ Clean this unit with a soft, dry cloth

- Never use alcohol, paint thinner or benzine to clean this unit.
- Before using chemically treated cloth, carefully read the instructions that came with the cloth.

■ This unit's lens

Use the lens cleaner (not supplied) to clean the unit's lens.

■ Clean discs



Wipe with a damp cloth and then wipe dry with a dry cloth.

■ Disc handling precautions

- Handle discs by the edges to avoid inadvertent scratches or fingerprints on the disc.
- Do not attach labels or stickers to discs.
- Do not use disc cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
- Do not use the following discs:
  - Discs with exposed adhesive from removed stickers or labels (rented discs, etc.).
  - Discs that are badly warped or cracked.
  - Irregularly shaped discs, such as heart shapes.

Playable media

Device	Media markings	Device types	Contents format
BD		BD-Video	Video
		BD-RE	Video, JPEG, MPO*, AAC, ALAC, DSD*, FLAC, MP3, WAV, WMA
		BD-R	Video, MKV, Xvid, AAC, ALAC, DSD*, FLAC, MP3, WAV, WMA
DVD		DVD-Video	Video
		DVD-R	Video, AVCHD, MKV, Xvid, JPEG, MPO*, AAC, ALAC, DSD*, FLAC, MP3, WAV, WMA
		DVD-R DL	
		DVD-RW	Video, AVCHD
	—	+R/+RW/+R DL	
CD		Music CD	Music [CD-DA]
	—	CD-R CD-RW	MKV, Xvid, JPEG, MPO*, AAC, ALAC, FLAC, MP3, Music [CD-DA], WAV, WMA
USB	—	USB devices (up to 4 TB)	MKV, MP4, MPEG2, Xvid, JPEG, MPO*, AAC, ALAC, DSD*, FLAC, MP3, WAV, WMA

* BDT271/270 BDT175/174/171/170 BDT166/165

● See pages 7 and 34 for more information on the types of content that can be played.

■ Types of discs that cannot be played by this unit

Any other disc that is not specifically supported or previously described.

- DVD-RAM
- Super Audio CD
- Photo CD
- DVD-Audio
- Video CD and Super Video CD
- HD DVD

■ Region management information

The unit can play back BD-Video/DVD-Video discs of the following regions codes, including "**ALL**":

Example: BD-Video DVD-Video

■ Finalize

Any DVD-R/RW/R DL, +R/+RW/+R DL and CD-R/RW that are recorded by a recorder need to be finalized by the recorder to play on this unit. Please refer to the recorder's instructions.

■ BD-Video

- This unit supports high bit rate audio (Dolby® Digital Plus, Dolby® TrueHD, DTS-HD High Resolution Audio™ and DTS-HD Master Audio™) adopted in BD-Video.
- If "Dolby D/Dolby D +/Dolby TrueHD" is set to "PCM" and "DTS Neo:6" is set to "Off", the maximum possible number of Dolby® sound is 2ch PCM. (⇨ 26)

BDT271/270 BDT175/174/171/170 BDT166/165

■ 3D

- 3D videos and 3D still pictures can be played back when this unit is connected to a 3D compatible TV using a High Speed HDMI Cable.
- BDT271/270 BDT175/174/171/170 2D video can be enjoyed as 3D virtually. (⇨ 24)

■ Music CD

Operation and sound quality of CDs that do not comply with CD-DA specifications (copy control CDs, etc.) cannot be guaranteed to work.

■ USB device

- This unit does not guarantee connection with all USB devices.
- This unit does not support USB device charging.
- FAT12, FAT16, FAT32, and NTFS file systems are supported.
- This unit supports USB2.0 High Speed.
- This unit supports an HDD formatted in FAT32 and NTFS. If the HDD is not recognized, the power to the HDD may not be supplied. Supply power from an external source.

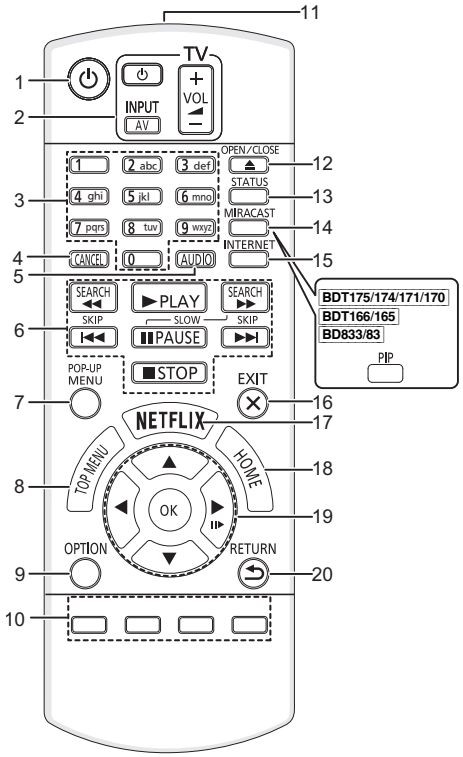
■ BD-RE, BD-R

Discs recorded in DR mode using Panasonic Blu-ray Disc recorders may not play back the audio etc., correctly.

- It may not be possible to play the above media in some cases due to the type of media, the condition of the recording, the recording method, and how the files were created.
- The producers of the disc can control how discs are played, so you may not always be able to control play as described in these operating instructions. Read the disc's instructions carefully.

Control reference guide

When other Panasonic devices respond to the remote control of the unit, change the remote control code. (⇨ 29)

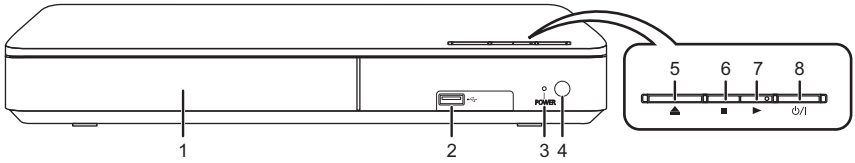


1 Turn the unit on and off
2 TV operation buttons
You can operate the Panasonic TV using this unit's remote control. Some buttons may not work depending on the TV.
[⏻ TV] : Turn the TV on and off
[AV] : Change input
[+ − VOL] : Adjust the volume
3 Select title numbers, etc./Enter numbers or BDT271/270 BDT175/174/171/170 characters
4 Cancel
5 Change soundtrack (⇨ 17)
6 Basic playback control buttons (⇨ 17)
7 Show Pop-up menu (⇨ 17)
8 Show Top menu (⇨ 17)
9 Show Option menu (⇨ 23)
10 Coloured buttons (red, green, yellow, blue)
Used for various purposes depending on the display
11 Transmit the remote control signal
12 Open or close the disc tray (⇨ 15)
13 Show the status messages (⇨ 18)
14 BDT271/270
Show Miracast™ screen (⇨ 20)
BDT175/174/171/170 BDT166/165 BD833/83
Switch Secondary Video on/off (Picture-in-picture) (⇨ 23)
15 Show the Home Screen of the Network Service (⇨ 19)
16 Exit the Menu screen
17 Show Netflix screen (⇨ 19)
18 Show HOME menu (⇨ 16)
19 [▲, ▼, ◄, ►] : Move the highlight for selection
[OK] : Confirm the selection
(❚❚►) : Frame-by-frame (⇨ 17)
20 Return to previous screen

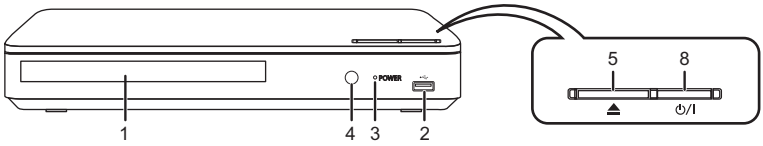
■ Available keys for HDMI CEC (⇨ 22)

3 Number keys
6 Basic playback control buttons
9 Option button
10 Coloured buttons (red, green, yellow, blue)
16 Exit button
19 [▲, ▼, ◄, ►]/[OK] button
20 Return button

BDT271/270
BDT175/174/171/170



BDT166/165
BD833/83



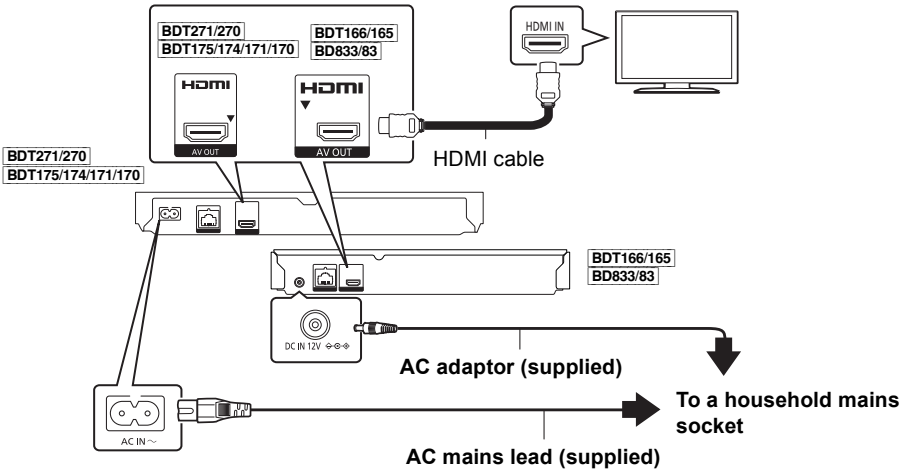
1 Disc tray (⇨ 15)
2 USB port (⇨ 15)
3 POWER LED
The LED lights up when the unit is turned on, and flashes when error occurs. (⇨ 33)
4 Remote control signal sensor
Distance: Within approx. 7 m
Angle: Approx. 20° up and down, 30° left and right
5 Open or close the disc tray (⇨ 15)
6 **BDT271/270** **BDT175/174/171/170**
Stop (⇨ 17)
7 **BDT271/270** **BDT175/174/171/170**
Start play (⇨ 17)
8 **Standby/on switch (⏻/I)** (⇨ 13)
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

Rear panel terminals (⇨ 10–12)

Connecting to a TV

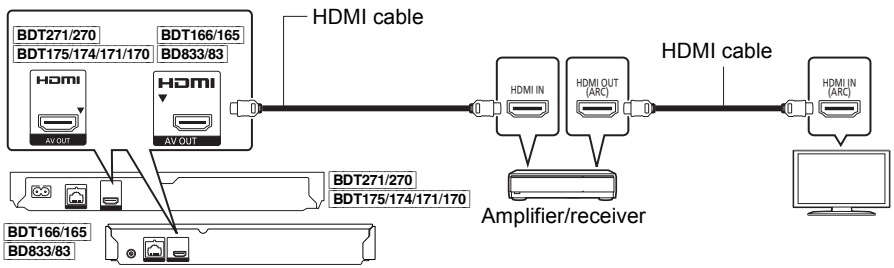
Connect the AC mains lead after making all connections.

- Before making any connections, we recommend that you temporarily disconnect all the units from AC power.



- Use the High Speed HDMI cables. Non-HDMI-compliant cables cannot be utilized.
  It is recommended that you use Panasonic's HDMI cable. When outputting 1080p or BDT271/270 BDT175/174/171/170 24p (4K) signal, please use HDMI cables 5.0 meters or less.
- This unit consumes a small amount of AC power (⇨ 34) even when turned off in standby mode. For the purpose of energy conservation, the unit should be disconnected if you will not be using it for extended period of time.
- BDT166/165 BD833/83 The unit is in the standby condition when the AC adaptor is connected. The primary circuit is always "live" as long as the AC adaptor is connected to an electrical outlet.

Connecting to an amplifier/receiver



- Set “Digital Audio Output” (⇨ 26).
- **BDT271/270** **BDT175/174/171/170** **BDT166/165** When connecting to a non-3D or **BDT271/270** **BDT175/174/171/170** 4K compatible amplifier/receiver, connect this unit to a TV, then connect the TV and the amplifier/receiver. Please note, however, that the audio can only be up to 5.1ch.
- When using the TV or amplifier/receiver that does not have the indication of “(ARC)” (non-ARC-compatible) on the HDMI terminal, the amplifier/receiver and TV must also be connected using an optical digital cable in order to enjoy the TV’s sound through the amplifier/receiver.

Connecting to the network

The following services can be used when this unit is connected to broadband.

- Firmware can be updated (⇨ 14)
- You can enjoy BD-Live (⇨ 18)
- You can enjoy Network Service (⇨ 19)
- You can access other devices (Home Network) (⇨ 20)
- BDT271/270 This unit supports Wi-Fi Direct® and can make a wireless connection to wireless devices without router. You can use this function when enjoying Home Network feature, etc. Internet access is not available while connected via Wi-Fi Direct®. (⇨ 20, 27)

For details about connection method, refer to the instructions supplied with the connected equipment.

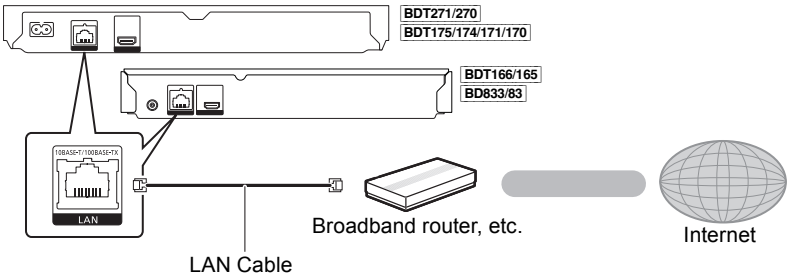
BDT271/270

Wireless LAN connection

This unit has built-in Wi-Fi® and can be connected to a wireless router.

- For up-to-date compatibility information on your wireless router, refer to **http://panasonic.jp/support/global/cs/** (This site is in English only.)
- The unit is not compatible with public wireless LAN services provided in airports, stations, cafes, etc.
- See page 3 for the precautions for wireless LAN connection.

LAN cable connection



- Use category 5 or above straight LAN cables (STP) when connecting to peripheral devices.
- Inserting any cable other than a LAN cable in the LAN port can damage the unit.

Settings

The following settings can be performed anytime in the Setup menu. (⇨ 27, 29)

Easy Settings

After connecting your new player for the first time and pressing [⏻], the basic settings screen will appear.

Preparation
Turn on the TV and select the appropriate video input.

1 **Press [⏻].**
Setup screen appears.

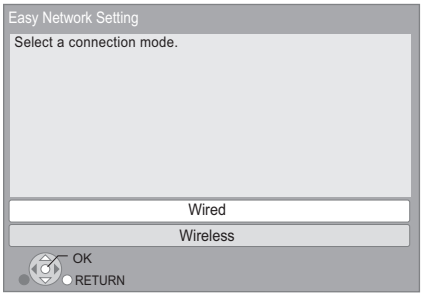
2 **Follow the on-screen instructions to continue with the settings.**

Easy Network Setting

After completing “Easy Settings”, you can perform “Easy Network Setting”.

Follow the on-screen instructions to establish your connection settings.

e.g., BDT271/270
Select “Wired” or “Wireless” and press [OK].



BDT271/270

■ About the wireless connection

Before beginning wireless connection setup
- Obtain your network name (SSID*).
- If your wireless connection is encrypted, please be sure that you know your encryption key.

If your SSID is not displayed;
- Search again by pressing the red button on the remote control.
- Stealth SSIDs will not be displayed; in this case, enter manually by using “Manual setting”.
  Press [HOME]
  ⇨ press [OK] to select “Setup”
  ⇨ select “Player Settings”
  ⇨ select “Network” and press [OK]
  ⇨ select “Network Settings” and press [OK]
  ⇨ select “Wireless Settings” and press [OK]
  ⇨ select “Connection Setting” and press [OK]
  ⇨ select “Manual setting” and press [OK]

If your wireless network is encrypted;
Encryption Key input screen will be displayed.
Input the encryption key of your network.
- An USB keyboard can be used, but only for the keys displayed on the screen.

If your wireless router is supports WPS (Wi-Fi Protected Setup™);
You can easily set up a connection by pressing the green button on the remote control.

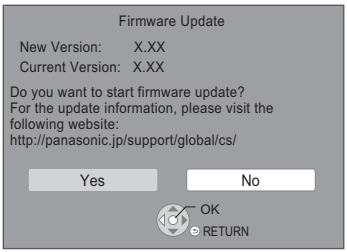
📖
- Refer to the operating instructions of the hub or router.
- BDT271/270 Do not use this unit to connect to any wireless network for which you do not have usage rights. Using these networks may be regarded as illegal access.
- If you have trouble getting online on your PC after performing network settings on this unit, perform the network settings on your PC.
- BDT271/270 Please be aware that connecting to a network without encryption may result in the leaking of data such as personal or secret information.

* SSID:
An SSID (Service Set IDentification) is a name used by wireless LAN to identify a particular network. Transmission is possible if the SSID matches for both devices.

Firmware updates

Occasionally, Panasonic may release updated firmware for this unit that may add or improve the way a feature operates. These updates are available free of charge.

This unit is capable of checking the firmware automatically when connected to the Internet via a broadband connection.*
When a new firmware version is available, the following message is displayed.



You can also download the latest firmware from the following website and store it to a USB device to update the firmware.
http://panasonic.jp/support/global/cs/
(This site is in English only.)

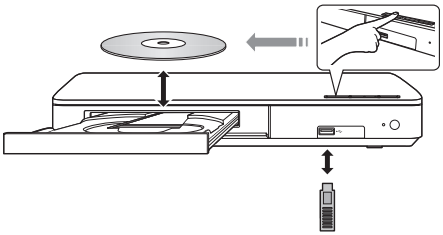
DO NOT DISCONNECT the unit from the AC power or perform any operation while the update takes place.
After the firmware is installed, unit will restart and the following screen will be displayed.

e.g.,

- **To show the firmware version on this unit. (⇨ 29, "Firmware Version Information")**
- **Downloading will require several minutes. It may take longer or may not work properly depending on the connection environment.**
- If you do not want to check for the latest firmware version, set "Automatic Update Check" to "Off". (⇨ 29)

* You must agree to the terms of use for the Internet function and the privacy policy. (**BDT271/270** **BDT175/174/171/170** ⇨ 16, "Notice", **BDT166/165** **BD833/83** ⇨ 28, "Notice")

Inserting or removing media



Notes

- When inserting a media item, ensure that it is facing the correct way, which is the right side facing up.
- If you connect a Panasonic product with a USB connection cable, the setup screen may be displayed on the connected equipment. For details, refer to the instructions for the connected equipment.

CAUTION

Do not place objects in front of the unit. The disc tray may collide with objects when it is opened, and this may cause malfunction.

HOME menu

Major functions of this unit can be operated from the HOME menu.

Preparation
Turn on the TV and select the appropriate video input.

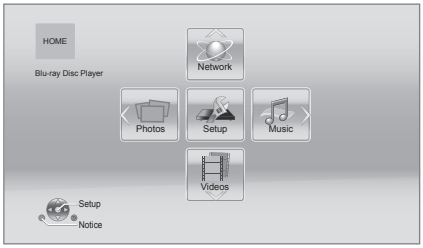
1 Press [⏻] to turn on the unit.

- After network service introduction banner is shown, the HOME menu is displayed.
  - – When connected to the network, the banner content may be changed.
  - – You can disable the “Start-up Banner” (⇨ 29).

2 Press [OK] or [▲, ▼, ◀, ▶] to select the item.

- If there are any other items, repeat this step.

BDT271/270 BDT175/174/171/170



Videos/Photos/Music

Disc	Play back the contents. (⇨ 17) ● When multiple contents are recorded, select the types of contents or the title.
USB	

BDT271/270 BDT175/174/171/170
Network

Network Service	Displays the Home Screen of Network Service. (⇨ 19)
Home Network	**DLNA Client** (⇨ 20)
	BDT271/270 **Miracast** (⇨ 20)
	Media Renderer (⇨ 21)

BDT166/165 BD833/83
Network Service
Displays the Home Screen of Network Service. (⇨ 19)

Setup

Player Settings	(⇨ 25)
USB Management	(⇨ 18)
Wallpaper	Changes the background of HOME menu.

BDT271/270 BDT175/174/171/170
Notice
Displays the terms of service for the cloud services.

To show the HOME menu
Press [HOME].

- Items to be displayed may vary with the media.

Playback

1 **Insert the media.**

Playback starts depending on the media.

2 **Select the item to play and press [OK].**

Repeat this step if necessary.

- DISCS CONTINUE TO ROTATE WHILE MENUS ARE DISPLAYED. Press [■STOP] when you have finished playback to protect the unit's motor, your TV screen and so on.
- It is not possible to play back AVCHD and MPEG2 videos which have been dragged and dropped or copied and pasted to the media.

Operations during playback

The following functions may not work depending on the media and contents.

Stop

Press [■STOP].

The stopping point is memorized.

Resume play function

Press [▶PLAY] to restart from this point.

- The point is cleared if the media is removed.
- **On BD-Video discs including BD-J, the resume play function does not work.**

Pause

Press [❚❚PAUSE].

- Press [❚❚PAUSE] again or [▶PLAY] to restart play.

Search/Slow motion

Search

While playing, press [SEARCH◀◀] or [SEARCH▶▶].

Slow motion

While paused, press [SEARCH▶▶].

- Xvid, MKV, MP4 and MPEG2: Not effective.

The speed increases up to 5 steps.

- Music, MP3, etc.: The speed is fixed to a single step.
- Press [▶PLAY] to revert to normal playback speed.

Skip

While playing or paused, press [⏮] or [⏭].

Skip to the title, chapter or track.

Frame-by-frame

While paused, press [▶] (❚❚▶).

- Press and hold to fast forward.
- Press [▶PLAY] to revert to normal playback speed.
- Xvid, MKV, MP4 and MPEG2: Not effective.

Changing soundtrack

Press [AUDIO].

You can change the audio channel number or soundtrack language, etc.

Show top menu/pop-up menu

Press [TOP MENU] or [POP-UP MENU].

Select the item and press [OK].

Show the status messages

While playing, press [STATUS].

The status messages give you information about what is currently being played. Each time you press [STATUS], the display information may change or disappear from the screen.

- Depending on media and contents, the display may change or not appear.

e.g., BD-Video

- Ⓐ T: Title, C: Chapter, PL: Playlist
- Ⓑ Elapsed time in the title
- Ⓒ Current position
- Ⓓ Total time

e.g., JPEG

BDT271/270 BDT175/174/171/170 BDT166/165

Enjoying 3D video and photos

Preparation

Connect this unit to a 3D compatible TV. (⇨ 10)

- Perform the necessary preparations for the TV.
- Play back following the instructions displayed on the screen.
- 3D Settings (⇨ 24, 26)

- Please refrain from viewing 3D images if you do not feel well or are experiencing visual fatigue.
  In the event that you experience dizziness, nausea, or other discomfort while viewing 3D images, discontinue use and rest your eyes.
- 3D video might not output the way it is set in "HDMI Video Format" and BDT271/270 BDT175/174/171/170 "24p(4K)/24p Output"/ BDT166/165 "24p Output" (⇨ 25).
- When playing back 3D photos from "Photos" screen, select from the "3D" list. (Still pictures in "2D" are played back in 2D.)
  If "2D" and "3D" indications are not displayed, press the red button on the remote control to switch the view of playback contents.

Enjoying BD-Live

With "BD-Live" discs, you can enjoy bonus contents that use Internet access.
For this BD-Live function, connection of a USB device is necessary along with Internet connection.

1 Perform network connection and settings. (⇨ 12, 13)

2 Connect a USB device with 1 GB or more free space.

- The USB device is used as the local storage.

3 Insert the disc.

■ Deleting data on the USB device

Select "USB Management" in the HOME menu (⇨ 16), then select "BD-Video Data Erase" and press [OK].

- The usable functions and the operating method may vary with each disc, please refer to the instructions on the disc and/or visit their website.
- "BD-Live Internet Access" may need to be changed for certain discs (⇨ 28).

Slideshow

Play a slideshow of photos and adjust various settings during the playback.

1 Insert the media.

2 Select "Photos".

3 Select an item and press the green button.

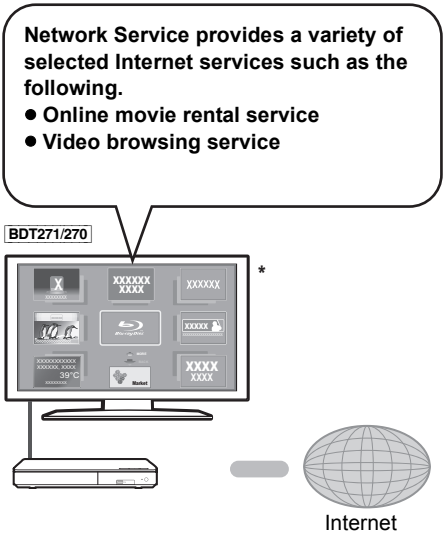
The following items can be set.

Start Slideshow	Start the slideshow. You can display still pictures in the selected folder one by one at a constant interval.
Interval	Change the display interval.
Transition Effect	Select the effect when sliding pictures.
Repeat Play	Set whether to repeat the slideshow.

- Still pictures displayed as " ⊠ " cannot be played back with this unit.

Enjoying Network Service

Network Service allows you to access some specific websites supported by Panasonic. BDT166/165 BD833/83 This unit has no full browser function and some features of websites may not be available.


Network Service provides a variety of selected Internet services such as the following.
● Online movie rental service
● Video browsing service
BDT271/270
*
Internet

* Images are for illustration purposes, contents may change without notice.

Preparation
- Network connection (⇨ 12)
- Network settings (⇨ 13)

1 Press [INTERNET].
- Netflix can be accessed directly by pressing [NETFLIX] button even when this unit is off.

2 Select the item and press [OK].

To exit from Network Service
Press [HOME].

- When playing content in the media, Network Service cannot be accessed by pressing [INTERNET].
- An USB keyboard can be used, but only for the keys displayed on the screen. It may not be used depending on the service.
- In the following cases, settings are possible using the Setup menu items.
  – When restricting the use of Network Service (⇨ 28, “Network Service Lock”)
  – When correcting the displayed time (⇨ 28, “Time Zone”, “Summer Time”)
  – When using another device such as a smartphone in combination with the unit by using a certain app on the device (⇨ 28, “Remote Device Operation”)
- When using a slow Internet connection, the video may not be displayed correctly. A high speed Internet service with a speed of at least 6 Mbps is recommended.
- Be sure to update the firmware as soon as a firmware update notice is displayed on the screen. If the firmware is not updated, you may not be able to use Network Service function properly. (⇨ 14)
- Network Service Home Screen is subject to change without notice.
- The services through Network Service are operated by their respective service providers, and service may be discontinued either temporarily or permanently without notice. Therefore, Panasonic will make no warranty for the content or the continuity of the services.
- Some features of websites or content of the service may not be available.
- Some content may be inappropriate for viewers.
- Some content may only be available for specific countries and may be presented in specific languages.

Home Network feature

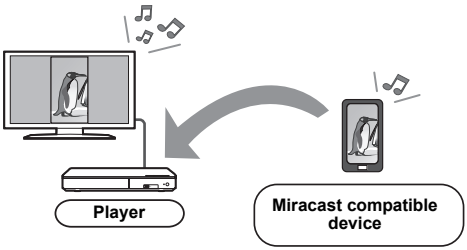
Before using the following features, be sure to configure the connected equipment on your Home Network.

BDT271/270

Using Miracast™

You can enjoy the content you are viewing on a Miracast-compatible smartphone, etc. on the big screen of your TV.

- Compatible with Android™ devices, ver. 4.2 and above and Miracast certified.
  For information on whether the smartphone, etc. supports Miracast, contact the manufacturer of the device.



1 Press [MIRACAST].

2 Operate the Miracast compatible device.

- On the device, enable Miracast and select this unit as the device to be connected. For details, refer to the instructions supplied with the device.

To exit from Miracast

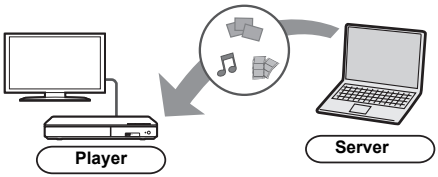
Press [HOME].

BDT271/270 BDT175/174/171/170

Playing back contents on the DLNA server

You can share photos, videos and music stored in the DLNA Certified media server [PC with Windows 7 installed, smartphone, recorders, etc.] connected to your home network.

- **About support format of DLNA (⇨ 35).**



Preparation

① Perform network connection (⇨ 12) and network settings (⇨ 13) of this unit.

② Add the contents and folder to the libraries of the Windows Media® Player or the smartphone, etc.

- Playlist of Windows Media® Player can play back only the contents that are stored in the libraries.

- When connected to Panasonic DLNA compatible recorders, register this unit to your Panasonic DLNA compatible recorders.

1 Press [HOME].

2 Select “Network”.

3 Select “Home Network”.

4 Select “DLNA Client”.

- The list can be updated by pressing the red button on the remote control.
- BDT271/270 The connection method can be switched to Wi-Fi Direct by pressing the green button on the remote control.

5 Select the equipment and press [OK].

6 Select the item to play and press [OK].

- You may be able to use convenient functions depending on the content by pressing [OPTION].

To exit from Home Network

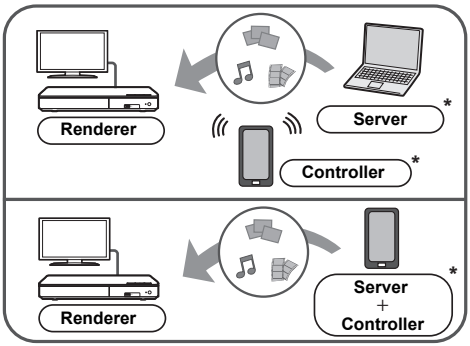
Press [HOME].

BDT271/270 BDT175/174/171/170

Using the Digital Media Controller

You can use a smartphone or tablet as the Digital Media Controller (DMC) to playback contents from DLNA server on the Renderer (this unit).

Possible applications:



* DMC compatible software should be installed.

Preparation

Perform steps ① and ②. (⇨ 20)

③ Perform the “Remote Device Settings”. (⇨ 28)

- You can register up to 16 devices.

1 Press [HOME].

2 Select “Network”.

3 Select “Home Network”.

4 Select “Media Renderer”.

5 BDT271/270 Select “Home Network” or “Wi-Fi Direct” and press [OK], then follow the indications on the screen.

6 Operate the DMC compatible devices.

To exit from Media Renderer screen

Press [HOME].

BDT271/270 BDT175/174/171/170

About DLNA and Media Renderer

For more details, refer to the following website and the operating instructions for each of the equipment.

http://panasonic.jp/support/global/cs/

(This site is in English only.)

- BDT271/270 Wi-Fi Direct connection while using Home Network feature is only temporary, and the network connection method returns to the original setting when exiting.
- BDT271/270 Depending on the device or connection environment, the data transfer rate may decrease.
- Depending on the contents and the connected equipment, playback may not be possible.
- Items displayed in grey on the display cannot be played back by this unit.

“HDMI CEC”

This unit supports “HDMI CEC” (Consumer Electronics Control) function.

You can use this function by connecting the equipment that supports “HDMI CEC”.
See the operating instructions for connected equipment for operational details.

Preparation

① Set “HDMI CEC” to “On” (⇨ 29).
(The default setting is “On”.)
② Set the “HDMI CEC” operations on the connected equipment (e.g., TV).
③ Turn on all “HDMI CEC” compatible equipment and select this unit’s input channel on the connected TV so that the “HDMI CEC” function works properly.
Repeat this procedure when the connections or settings are changed.

Automatic input switching Power on link

When the unit starts playback, the TV will automatically switch the input channel and the screen of the unit will be displayed.
Additionally when the TV is off, the TV will automatically turn on.

Power off link

All connected equipment compatible with “HDMI CEC”, including this unit, automatically turns off when you switch the TV off.

Easy control only with TV remote control

By using the TV remote control, you can perform the same operations as you use the remote control of this unit. (⇨ 8)

- This unit supports the “HDMI CEC” (Consumer Electronics Control) function. However, operation cannot be guaranteed on all HDMI CEC devices.

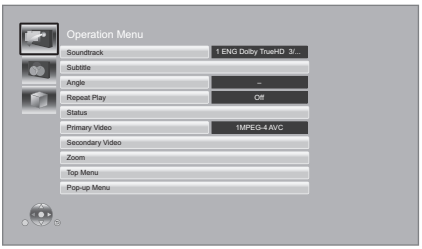
Option menu

A variety of playback operations and settings can be performed from this menu.
Available options differ depending on the playing contents and the condition of the unit.

1 Press [OPTION].

- When playing music, select “Playback Settings” and press [OK].

BDT271/270 BDT175/174/171/170 BDT166/165
e.g., BD-Video



2 Select an item and change the settings.

To exit the screen
Press [OPTION].

Regarding Language : (⇨ 35)

Operation Menu

■ **Soundtrack**
Show or change the soundtrack.

■ **Audio channel**
Select the audio channel number.

■ **Subtitle**
Change the subtitle settings.

■ **Angle**
Select the number of the angle.

■ **Repeat Play**
Select the item that you want to repeat.
- You can repeat the playback of a chapter, playlist, the entire disc, etc., but the items displayed will differ depending on the type of the media.
- Select “Off” to cancel.

■ **Random**
Select whether or not to play random.

■ **Start Slideshow**
Start the slideshow.

■ **Status**
Show the status messages.

BDT271/270 BDT175/174/171/170
■ **Sound**
Select the soundtrack and audio channel number during the playback of DLNA.

BDT271/270
■ **Reception**
The radio wave status during the playback of DLNA is displayed. (Only when a wireless connection is used)

■ **Rotate RIGHT**
■ **Rotate LEFT**
Rotate the still picture.

■ **Wallpaper**
Set the still picture to the wallpaper of HOME menu. (⇨ 16)

■ **Video**
The recording method of original video appears.

■ **Primary Video**
The recording method of original primary video appears.

■ **Secondary Video**

Video	Select on/off for images. The recording method of original video appears. ● During search/slow motion, only the primary video is displayed.
Soundtrack	Select on/off for audio and the language.

■ **Zoom**
Videos and pictures are magnified.

■ **Top Menu**
Display Top Menu.

■ **Pop-up Menu**
Display Pop-up Menu.

■ **Menu**
Display Menu.

Picture Settings

■ Picture Mode

Select the picture quality mode during play.

- If you select “User”, you can change settings in “Picture Adjustment”.

■ Picture Adjustment

Specific picture quality settings can be changed.

■ Progressive

Select the method of conversion for progressive output to suit the type of material being played.

- If the video is disrupted when “Auto” is selected, select either “Video” or “Film” depending on the material to be played back.

■ 24p

Movies and other material recorded on DVD-Video at 24p are output at 24p.

- BDT271/270 BDT175/174/171/170 Only when you have selected “24p(4K)” or “24p” in “24p(4K)/24p Output” (⇨ 25) and play discs recorded at a rate of 60 fields per second.
  BDT166/165 BD833/83 Only when you have selected “On” in “24p Output” (⇨ 25) and play discs recorded at a rate of 60 fields per second.
- This may not work with the PAL contents.

■ Reset to Default Picture Settings

Return picture settings to the factory defaults.

BDT271/270 BDT175/174/171/170 BDT166/165

3D Settings

BDT271/270 BDT175/174/171/170

■ Signal Format

Original	Keep original picture format.
Side by side	3D picture format comprising of left and right screens.
2D to 3D	Converts 2D pictures to 3D effect.

■ Distance

Set the amount of depth perception.

■ Graphic Display Level

3D position for the Option menu or message screen, etc. can be adjusted during 3D playback.

Setup menu

Change the unit's settings if necessary. The settings remain intact even if you switch the unit to standby.
Some items are common to the Option menu. You can get the same effect with both menus.

1 Press [HOME].

2 Press [OK] to select "Setup".

3 Select "Player Settings".

BDT271/270 BDT175/174/171/170 BDT166/165

4 Select an item and change the settings.

To exit the screen
Press [HOME].

Picture

■ **Picture Mode (⇨ 24)**

■ **Picture Adjustment (⇨ 24)**

■ **HDMI Output**
Press [OK] to show the following settings:

➢ **HDMI Video Format**
The items supported by the connected devices are indicated on the screen as "∗". When any item without "∗" is selected, the images may be distorted.
- If "Automatic" is selected, the best suited output resolution to the connected TV is automatically selected.
- To enjoy high-definition video up-converted to 1080p, you need to connect the unit directly to 1080p compatible HDTV (High Definition TV). If this unit is connected to an HDTV through other equipment, the other equipment must also be 1080p compatible.

BDT271/270 BDT175/174/171/170
➢ **24p(4K)/24p Output**
This setting is for selecting the output method for content recorded in 24p*1, such as movies.

24p(4K)	Outputs signals by upconverting them to 4K*2.
24p	Outputs in 24p.

- Connect the compatible TV for each (4K or 1080/24p) output to the HDMI AV OUT terminal of this unit.
- "24p(4K)" works only when playing back in 2D.
- When playing DVD-Video, set this setting to "24p(4K)" or "24p", and then "24p" in "Picture Settings" (⇨ 24) to "On".
- When BD-Video/DVD-Video images other than 24p are played, images are output at 60p.

BDT166/165 BD833/83
➢ **24p Output**
When this unit is connected to a TV supporting 1080/24p output, movies and other material recorded at 24p*1 are output at 24p.
- When playing DVD-Video, set to "On" and then set "24p" in "Picture Settings" (⇨ 24) to "On".
- When BD-Video/DVD-Video images other than 24p are played, images are output at 60p.

➢ **Deep Colour Output**
This setting is for selecting whether to use Deep Colour Output when a TV that supports Deep Colour is connected.

➢ **Contents Type Flag**
Depending on the playback content, the TV will output adjusting to the optimal method when a TV that supports this function is connected.

*1 A progressive image recorded at a rate of 24 frames per second (motion-picture film). Many BD-Video movie contents are recorded in 24 frames/second in accordance with the film materials.

*2 A high resolution image/display technology of approximately 4000 (width) × 2000 (height) pixels.

Sound

■ Dynamic Range Compression

You can listen at low volumes but still hear dialogue clearly.
(Dolby Digital, Dolby Digital Plus and Dolby TrueHD only)

- "Automatic" is effective only when playing Dolby TrueHD.

■ Digital Audio Output

Press [OK] to show the following settings:

➢ **Dolby D/Dolby D +/Dolby TrueHD**
➢ **DTS/DTS-HD**
BDT271/270 BDT175/174/171/170 BDT166/165
➢ **DSD Output Mode**
Select the audio signal to output.

- Select "PCM" or BDT271/270 BDT175/174/171/170 BDT166/165 "Off", when the connected equipment cannot decode the respective audio format. This unit decodes the audio format and transmits to the connected equipment.
- If you do not make proper settings the audio may be static or noisy.

➢ **BD-Video Secondary Audio**
Select whether or not to mix the primary and secondary audio (including the button click sound).
If "Off" is selected, the unit outputs the primary audio only.

■ Downmix

Select the downmix system of multi-channel to 2-channel sound.

- Select "Surround encoded", when the connected equipment supports the virtual surround function.
- The downmix effect is not available when "Digital Audio Output" is set to "Bitstream".
- The audio will be output in "Stereo" in the following cases:
  – AVCHD playback
  – Playback of secondary audio (including the button click sound).

■ DTS Neo:6

2ch (2.1ch) audio is expanded to 7ch (7.1ch).

- This function works when the following conditions are met:
  – Audio recorded at 96 kHz or lower is output.
  – "Digital Audio Output" is set to "PCM" when audio other than PCM is output.

BDT271/270 BDT175/174/171/170 BDT166/165

3D

■ 3D BD-Video Playback

Select the playback method of 3D compatible video software.

■ 3D Playback Message

Set to display or hide the 3D viewing warning screen when playing back the 3D compatible video software.

■ Graphic Display Level (⇨ 24)

Language

■ Soundtrack Preference

Choose the language for audio.

- If “Original” is selected, the original language of each disc will be selected.
- When the selected language is not recorded on the disc, or depending on how the navigation is created on the disc, it may playback in a different language than the selected language.
- Enter a code (⇨ 35) when you select “Other ∗∗∗∗”.

■ Subtitle Preference

Choose the language for the subtitle.

- When “Automatic” is selected, a subtitle for the language selected in the “Soundtrack Preference” is displayed only when the language other than the language selected in the “Soundtrack Preference” is played back.
- When the selected language is not recorded on the disc, or depending on how the navigation is created on the disc, it may playback in a different language than the selected language.
- Enter a code (⇨ 35) when you select “Other ∗∗∗∗”.

■ Menu Preference

Choose the language for the disc menus.

- Enter a code (⇨ 35) when you select “Other ∗∗∗∗”.

■ Subtitle Text

Select a desired item according to the language used for MKV/Xvid subtitles text.

- This item is displayed only after playing back a file.

■ On-Screen Language

Choose the language for menus and on-screen messages.

Network

■ Easy Network Setting (⇨ 13)

■ Network Settings

Perform network-related settings individually.
Press [OK] to show the following settings:

BDT271/270

➢ LAN Connection Mode

Select the LAN connection method.

- When not using wireless LAN (when turning it off), select “Wired”.

BDT271/270

➢ Wireless Settings

This allows the wireless router and connection settings to be set up. Current connection settings and connection state can be checked.
Press [OK] to show the following settings:

Connection Setting

The wireless router connection wizard will be displayed.

Double Speed Mode Setting (2.4GHz)

Set the connection speed for a 2.4 GHz wireless format.

- If you connect using the “Double Speed Mode (40MHz)”, 2 channels use the same frequency band, and there is consequently a greater risk of reception interference. This can cause the connection speed to drop or become unstable.

➢ IP Address / DNS Settings

This is for checking the state of the network connection and setting the IP address and DNS-related.
Press [OK] to show the respective setting.

➢ Proxy Server Settings

This is for checking the state of connection with the Proxy server and performing settings.
Press [OK] to show the respective setting.

➢ Network Service Settings (⇨ 19)

Press [OK] to show the following settings:

Time Zone
Set the unit's time to match your location.
- Some Network Service contents require the time zone to be set. Set time zone if necessary.

Summer Time
Select "On" when using summer time.

BDT271/270 BDT175/174/171/170
➢ Network Drive Connection

This unit can access a hard disk shared folder on a network and play back videos, still pictures, and music.
For the setting and operation method of connected equipment, refer to the following website.
http://panasonic.jp/support/global/cs/
(This site is in English only.)

➢ Remote Device Settings (⇨ 19, 21)

Press [OK] to show the following settings:

Remote Device Operation
Enable to start Network Service on this unit by using another device such as Smartphone, etc.
BDT271/270 BDT175/174/171/170 Enable to operate the unit by DMC.
- If "On" is selected, "Quick Start" will be activated.

Device Name Entry
Set the name of this unit to be displayed on the connected equipment.

BDT271/270 BDT175/174/171/170
Registration Type

Automatic	Allow connections to all the equipment accessing this unit.
Manual	Set the permission for individual equipment connections accessing this unit.

BDT271/270 BDT175/174/171/170
Remote Device List
Registering/deregistering of the displayed equipment can be performed when "Manual" in "Registration Type" is selected.

➢ BD-Live Internet Access (⇨ 18)

You can restrict Internet access when BD-Live functions are used.
- If "Limit" is selected, Internet access is permitted only for BD-Live contents which have content owner certificates.

BDT166/165 BD833/83
■ Notice
Displays the terms of service for the cloud services.

Ratings

The following items use the same password. Don't forget your password.

■ DVD-Video Ratings
Set a ratings level to limit DVD-Video play.

■ BD-Video Ratings
Set an age limit of BD-Video play.

■ Network Service Lock
You can restrict the usage of Network Service.

System

■ Easy Settings
You can execute basic settings.

■ TV Settings
Press [OK] to show the following settings:

➢ TV Aspect
Set to match the type of TV connected.

When connected to a 4:3 aspect TV and playing 16:9 ratio image:

4:3 Pan & Scan	The sides are cut off so the picture fills the screen. When playing BD-Video, video is output as “4:3 Letterbox”.
4:3 Letterbox	Black bands appear at the top and bottom of the picture.

When connected to a 16:9 widescreen TV and playing 4:3 ratio image:

16:9	Video is displayed as a 4:3 ratio image in the centre of the screen.
16:9 full	Video is displayed as a horizontally stretched 16:9 image.

➢ TV System
Perform the setup so it matches the TV System of the connected TV.

➢ Screen Saver Function
This is to prevent image retention on the screen.
- When this is set to “On”:
  If a list of playback content is displayed and there is no operation for 10 minutes or more, the screen switches to HOME menu automatically.
- While playing and pausing, etc., this function is not available.

➢ On-Screen Messages
Choose whether to show status messages automatically.

➢ HDMI CEC
Set to use “HDMI CEC” function when connected to a device that supports “HDMI CEC”.
- Select “Off” when you do not want to use “HDMI CEC”.

■ Start-up Banner
Select whether to display the banner after turning on this unit. (⇨ 16)

■ Quick Start
Speed of start-up from standby mode is increased.
- When set to “On”, the internal control unit will be powered and in Network standby mode. The idle power consumption will increase so compared to when set to “Off”.
  (Power consumption ⇨ 34)

■ Remote Control
Change the remote control code if other Panasonic products react to this remote control.

■ Firmware Update (⇨ 14)
Press [OK] to show the following settings:

➢ Automatic Update Check
When this equipment remains connected to the Internet, it will check for the latest firmware version when it is turned on and you can update it if necessary.

➢ Update Now
You can update the firmware manually if a firmware update is available.

■ System Information
Press [OK] to show the following settings:

➢ Software Licence
Information about the software used by this unit is displayed.

➢ Firmware Version Information
Display firmware version of this unit and BDT271/270 wireless LAN module.

■ Default Settings
This returns all values in the Setup menu and the Option menu to the default settings, except for some settings of network, ratings, remote control code, on-screen language, etc.

Troubleshooting guide

Before requesting service, please perform the following checks.
If the problem remains unresolved, consult your dealer for instructions.

■ Unit does not respond to remote control or unit's buttons.

Disconnect the AC mains lead, wait 1 minute, then reconnect the AC mains lead.

Do you have the latest firmware installed?
Panasonic is constantly improving the unit's firmware to ensure that our customers are enjoying the latest technology. (⇨ 14)

The following do not indicate a problem with this unit:
– Regular disc rotating sounds.
– Image disturbance during search.
– BDT271/270 BDT175/174/171/170 BDT166/165 Image disturbance when replacing 3D discs.

■ Cannot eject disc.

① Turn the unit on.
② Press and hold [OK], the yellow button and the blue button on the remote control at the same time for more than 5 seconds.
– POWER LED starts to flash, and "00 RET" is displayed on the screen.
③ Press [►] (right) repeatedly on the remote control until "06 FTO" is displayed on the screen.
④ Press [OK].

General operation

To return to the factory defaults.

➢ Select "Yes" in "Default Settings" in the Setup menu. (⇨ 29)

To return all settings to the factory preset.

➢ Reset the unit as follows:
① Turn the unit on.
② Press and hold [OK], the yellow button and the blue button on the remote control at the same time for more than 5 seconds.
– POWER LED starts to flash, and "00 RET" is displayed on the screen.
③ Press [►] (right) repeatedly on the remote control until "08 FIN" is displayed on the screen.
④ Press and hold [OK] for more than 5 seconds.

The remote control does not work properly.

➢ Change the batteries in the remote control. (⇨ 5)
➢ The remote control and this unit are using different codes.
Turn on this unit by using the standby/on switch on this unit, and check "Remote control □", which is displayed on the screen when you press a button on the remote control.
Press and hold [OK] and the displayed number ("□") for more than 5 seconds.

The TV tuner mode is not displayed when the TV is turned on.

➢ This phenomenon may occur, depending on the TV setting, when "Quick Start" is set to "On".
➢ Depending on the TV, this phenomenon may be prevented by reconnecting the HDMI cable to a different HDMI input terminal or by changing the HDMI auto connection setting.

This unit is turned off automatically.

➢ To save on electricity, this unit is turned off automatically if there is no button operation for about 20 minutes when not playing back (such as when paused or displaying the menu, displaying still pictures, etc.).

You have forgotten your ratings password. You want to cancel the ratings level.

➢ The ratings level returns to the factory defaults.
① Turn the unit on.
② Press and hold [OK], the yellow button and the blue button on the remote control at the same time for more than 5 seconds.
– POWER LED starts to flash, and "00 RET" is displayed on the screen.
③ Press [►] (right) repeatedly on the remote control until "03 VL" is displayed on the screen.
④ Press [OK].

The TV screen turns black.

➢ In the following cases, HDMI authentication takes place and a black screen is displayed:
– BDT271/270 BDT175/174/171/170 When "24p(4K)/24p Output" is set to "24p(4K)" or "24p".
– BDT166/165 BD833/83 When "24p Output" is set to "On".
– BDT271/270 BDT175/174/171/170 BDT166/165 When the display is switched between 2D and 3D images.

This unit does not recognize the USB connection correctly.

- Disconnect and re-connect the USB cable. If it still does not recognize the connection, turn this unit off and on again.
- USB devices may not be recognized by this unit when connected using the following :
  – a USB hub
  – a USB extension cable
- If you connect USB HDD to this unit, use the USB cable that is supplied with the HDD.

Picture

The images from this unit do not appear on the TV.
Picture is distorted.

- An incorrect resolution is selected in “HDMI Video Format”. Reset the setting as follows:

① Turn the unit on.
② Press and hold [OK], the yellow button and the blue button on the remote control at the same time for more than 5 seconds.
  – POWER LED starts to flash.
③ Press [8] and the blue button on the remote control at the same time for more than 5 seconds.
  Set the item again. (⇨ 25)
  – When Dolby Digital Plus, Dolby TrueHD, and DTS-HD® audio are not output properly, select “Yes” in “Default Settings” (⇨ 29) and make proper settings.

- PAL discs cannot be correctly viewed on an NTSC TV.
- BDT271/270 BDT175/174/171/170 BDT166/165 When “3D BD-Video Playback” in the Setup menu is set to “Automatic”, images may not be output depending on the connection method. After removing the disc from this unit, select “Set before play” in the Setup menu, and select “2D Playback” in the setup screen displayed when playing 3D discs. (⇨ 26)
- BDT271/270 BDT175/174/171/170 When outputting in 24p (4K), images may be distorted depending on the HDMI cable. Use an HDMI cable that supports 4K output.

Video is not output in high-definition.

- Confirm that “HDMI Video Format” in the Setup menu is set properly. (⇨ 25)

BDT271/270 BDT175/174/171/170 BDT166/165
3D video is not output.

- Connect to a full high-definition TV.
- Is there a non-3D compatible amplifier/ receiver connected between this unit and a TV? (⇨ 11)
- Are the settings on this unit and the TV correct? (⇨ 18)
- Is the amplifier/receiver that is connected between this unit and TV on?
- Depending on the connected TV, the video being played back might switch to 2D video due to changes in resolution etc. Check the 3D setting on the TV.

BDT271/270 BDT175/174/171/170 BDT166/165
3D video is not output correctly as 2D.

- Select “Set before play” in the Setup menu, and select “2D Playback” in the setup screen displayed when playing 3D discs. (⇨ 26, “3D BD-Video Playback”)
- Discs that have recorded titles with Side by side (2 screen structure) and that can be enjoyed in 3D are played back in accordance with the settings of the TV.

A black band is displayed around the edge of the screen.
The aspect ratio of the screen is abnormal.

- Confirm the “TV Aspect” is set properly. (⇨ 29)
- Adjust the aspect setting on the TV.

Audio

Cannot switch audio.

- The audio cannot switch, if “Digital Audio Output” is set to “Bitstream” or BDT271/270 BDT175/174/171/170 BDT166/165 “On”*. Set “Digital Audio Output” to “PCM” or BDT271/270 BDT175/174/171/170 BDT166/165 “Off”*. (⇨ 26)

* For “DSD Output Mode”

Cannot hear the desired audio type.

- Check the connections and the “Digital Audio Output” settings. (⇨ 11, 26)

Playback

Disc cannot be played.

- The disc is dirty. (⇨ 5)
- The disc is not finalized. (⇨ 7)

Still pictures (JPEG) do not play back normally.

- The images that were edited on the PC, such as Progressive JPEG, etc., may not be played back.

I can’t play back BD-Live.

- Confirm that this unit is connected to the broadband Internet. (⇨ 12)
- Confirm the “BD-Live Internet Access” settings. (⇨ 28)
- Confirm a USB device is connected to the USB port. (⇨ 15)
- Connect this unit to the network by a wired connection.

Network

I can’t connect to the network.

- Confirm the network connection and settings. (⇨ 12, 13, 27)
- BDT271/270 There may be interference that prevents the unit from detecting your home network. Place the unit and the wireless router closer to each other. This unit may be able to detect your network name (⇨ 13, “SSID”).
- Check the operating instructions for each device and connect accordingly.

BDT271/270

When using wireless LAN connection, video from the DLNA Certified media server is not played back or video frames are dropped during playback.

- Higher transfer rate router such as 802.11n (2.4 GHz) wireless router may solve the problem. If you use 802.11n (2.4 GHz) wireless router, it is necessary to set the encryption type to “AES”.
  Simultaneous use with a microwave, cordless telephone etc. at 2.4 GHz may result in connection interruptions or other problems.
- On the “Wireless Settings” screen (⇨ 27), the continuous lighting of at least 4 “Reception” indicators is the target for a stable connection. If 3 or fewer indicators are lit or the connection is being interrupted, change the position or angle of your wireless router and see if the connection state improves. If there is no improvement, connect to a wired network and perform the “Easy Network Setting” (⇨ 13) again.

Messages on the screen

Cannot play.

- You inserted an incompatible disc.

Cannot play on this unit.

- You tried to play a non-compatible image.
- Re-insert the media.

No disc inserted.

- The disc may be upside down.

⃠ This operation is not available.

- Some operations are unsupported by the unit. (For example, reverse slow motion, etc.)

IP address is not set.

- The “IP Address” in “IP Address / DNS Settings” is “---. ---. ---. ---”. Set the “IP Address”, “Subnet Mask”, and “Gateway Address”. (Select the automatic address acquisition if necessary.)

BDT271/270

The wireless access point currently has a low network security setting. It is recommended to change to a higher setting.

- Set a stronger network security level referring to the wireless router operating instructions.

POWER LED

When the POWER LED is flashing, check the message on the TV screen. If a message is not displayed on the TV screen, determine the type of the error by checking the way the POWER LED is flashing.

Flashes 6 times

- The remote control and this unit are using different codes.
  Turn on this unit by using the standby/on switch on this unit, and check “Remote control □”, which is displayed on the screen when you press a button on the remote control. Press and hold [OK] and the displayed number (“□”) for more than 5 seconds.

Flashes

- The copyright protected disc cannot be played back.
  One of the devices connected to this unit (TV, amplifier, etc.) does not support copyright protection.

Flashes 3 times

- The disc in use cannot be played back since the copyright information is invalid.

Specifications

General

Signal system	PAL/NTSC
Operating temperature range	+5 °C to +35 °C
Operating humidity range	10 % to 80 % RH (no condensation)
HDMI AV output	Output connector: Type A (19 pin) 1 system
USB slot	USB2.0: 1 system
Ethernet	10BASE-T/100BASE-TX 1 system
BDT271/270 **Wireless LAN**	**Standard Compliance:** IEEE802.11 b/g/n
	Frequency range: 2.4 GHz band
	Security: WPA™/WPA2™ (Encryption Type: TKIP/AES, Authentication Type: PSK), WEP (64 bit/128 bit)
LASER Specification	**Class 1 LASER Product** **Wave length:** 790 nm (CDs)/ 660 nm (DVDs)/405 nm (BDs) **Laser power:** No hazardous radiation is emitted with the safety protection
Power supply	BDT271/270 BDT175/174/171/170 **AC 220 V to 240 V, 50 Hz** BDT166/165 BD833/83 **DC 12 V 0.8 A (DC IN terminal)**
Power consumption	BDT271/270 BDT175/174/171/170 **Approx. 13 W** BDT166/165 BD833/83 **Approx. 11 W**
Power consumption in standby mode	**Approx. 0.5 W** (Quick Start: Off)
Power consumption in Network standby mode	BDT271/270 BDT175/174/171/170 **Approx. 5.5 W** BDT166/165 BD833/83 **Approx. 3.5 W** (Quick Start: On)
Dimensions (W×H×D)	BDT271/270 BDT175/174/171/170 312 mm×43 mm×180 mm BDT166/165 BD833/83 245 mm×38.5 mm×175 mm
Mass	BDT271/270 BDT175/174/171/170 Approx. 1.0 kg BDT166/165 BD833/83 Approx. 0.8 kg

- Specifications are subject to change without notice.

File format

File format	Extension	Reference
MKV	".MKV", ".mkv"	• The video file and subtitles text file are inside the same folder, and the file names are the same except for the file extensions. • Some MKV/Xvid files may not be played back correctly, depending on the video resolution, frame rate condition, subtitle format and so on.
	Subtitles text file ".SRT", ".srt", ".SSA", ".ssa", ".ASS", ".ass"	
Xvid	".AVI", ".avi"	
	Subtitles text file ".SRT", ".srt", ".SUB", ".sub", ".TXT", ".txt"	
mp4 (H.264+AAC)	".MP4", ".mov"	Some mp4/MPEG files may not be played back correctly, depending on the video resolution, frame rate condition and so on.
MPEG (TS/PS)	".mpg", ".mpeg", ".m2ts", ".mts", ".ts"	
JPEG	".JPG", ".jpg", ".jpeg"	• MOTION JPEG and Progressive JPEG are not supported. • You may not be able to play back the file if you have edited the folder structure or the file name on a PC or other device.
BDT271/270 BDT175/174/171/170 BDT166/165 **MPO**	".MPO", ".mpo"	3D still picture
MP3	".MP3", ".mp3"	This unit supports ID3 tags, but only titles, artist names and album names can be displayed.
FLAC	".FLAC", ".flac"	Maximum sampling rate: 192 kHz/24 bit
WAV	".WAV", ".wav"	Maximum sampling rate: 192 kHz/24 bit
AAC	".M4A", ".m4a", ".AAC", ".aac"	This unit supports ID3 tags. Maximum sampling rate: 48 kHz/320 kbps
WMA	".WMA", ".wma"	This unit supports ID3 tags. Maximum sampling rate: 48 kHz/385 kbps
BDT271/270 BDT175/174/171/170 BDT166/165 **DSD**	".DSF", ".dsf", ".DFF", ".dff"	Maximum sampling rate: 5644 kHz/8 ch
ALAC	".M4A", ".m4a"	Maximum sampling rate: 192 kHz/24 bit/2 ch

- With certain recording states and folder structures, the play order may differ or playback may not be possible.

Audio information

The audio output differs depending on the settings on the unit. (⇨ 26, “Digital Audio Output”)

- The number of channels listed is the maximum possible number of output channels when connected to amplifier/ receiver compatible with the respective audio format.

	“Digital Audio Output”	
	“Bitstream”/“On”*4	“PCM”*2/“Off”*4
Output channel*3	Outputs using original audio*1	BD-Video : 7.1ch PCM*1 DVD-Video : 5.1ch PCM

*1 When “BD-Video Secondary Audio” is set to “On”, the audio will be output as Dolby Digital, DTS Digital Surround™ or 5.1ch PCM.
*2 The maximum possible number of Dolby sound is 2ch PCM.
*3 When “DTS Neo:6” is set to “Cinema” or “Music”, 2ch (2.1ch) audio can be expanded to 7ch (7.1ch) and output. (⇨ 26)
*4 For “DSD Output Mode”

BDT271/270 BDT175/174/171/170

Supported format for DLNA

- File formats that are not supported by your DLNA server cannot be played.

Video

Container	Video codec	Audio codec	Example of file extension
MKV	H.264	AAC DTS® PCM Vorbis FLAC	.mkv
Xvid*	MPEG-4 Advanced Simple Profile (ASP)	MP3 Dolby Digital	.avi
AVCHD	H.264	Dolby Digital	.mts
MP4		AAC	.mp4, .mov
PS	MPEG2	Dolby Digital Linear PCM	.mpg, .mpeg
TS	MPEG2 H.264	AAC Dolby Digital	.m2ts, .ts

Photo

Format	Example of file extension
JPEG	.jpg

Audio

Audio codec	Example of file extension
MP3	.mp3
FLAC	.flac
WAV	.wav
AAC	.m4a
WMA	.wma
ALAC	.m4a
DSD	.dsf, .dff
Linear PCM	—

* Only when the file is transcoded by DLNA server.

Display languages list

Display	Language	Display	Language	Display	Language
ENG	English	JPN	Japanese	ARA	Arabic
FRA	French	CHI	Chinese	HIN	Hindi
DEU	German	KOR	Korean	PER	Persian
ITA	Italian	MAL	Malay	IND	Indonesian
ESP	Spanish	VIE	Vietnamese	MRI	Maori
NLD	Dutch	THA	Thai	BUL	Bulgarian
SVE	Swedish	POL	Polish	RUM	Romanian
NOR	Norwegian	CES	Czech	GRE	Greek
DAN	Danish	SLK	Slovak	TUR	Turkish
POR	Portuguese	HUN	Hungarian	∗	Others
RUS	Russian	FIN	Finnish		

Language code list

Language	Code	Language	Code	Language	Code
Abkhazian:	6566	Gujarati:	7185	Rhaeto-Romance:	8277
Afar:	6565	Hausa:	7265	Romanian:	8279
Afrikaans:	6570	Hebrew:	7387	Russian:	8285
Albanian:	8381	Hindi:	7273	Samoan:	8377
Amharic:	6577	Hungarian:	7285	Sanskrit:	8365
Arabic:	6582	Icelandic:	7383	Scots Gaelic:	7168
Armenian:	7289	Indonesian:	7378	Serbian:	8382
Assamese:	6583	Interlingua:	7365	Serbo-Croatian:	8372
Aymara:	6589	Irish:	7165	Shona:	8378
Azerbaijani:	6590	Italian:	7384	Sindhi:	8368
Bashkir:	6665	Japanese:	7465	Singhalese:	8373
Basque:	6985	Javanese:	7487	Slovak:	8375
Bengali; Bangla:	6678	Kannada:	7578	Slovenian:	8376
Bhutani:	6890	Kashmiri:	7583	Somali:	8379
Bihari:	6672	Kazakh:	7575	Spanish:	6983
Breton:	6682	Kirghiz:	7589	Sundanese:	8385
Bulgarian:	6671	Korean:	7579	Swahili:	8387
Burmese:	7789	Kurdish:	7585	Swedish:	8386
Byelorussian:	6669	Laotian:	7679	Tagalog:	8476
Cambodian:	7577	Latin:	7665	Tajik:	8471
Catalan:	6765	Latvian, Lettish:	7686	Tamil:	8465
Chinese:	9072	Lingala:	7678	Tatar:	8484
Corsican:	6779	Lithuanian:	7684	Telugu:	8469
Croatian:	7282	Macedonian:	7775	Thai:	8472
Czech:	6783	Malagasy:	7771	Tibetan:	6679
Danish:	6865	Malay:	7783	Tigrinya:	8473
Dutch:	7876	Malayalam:	7776	Tonga:	8479
English:	6978	Maltese:	7784	Turkish:	8482
Esperanto:	6979	Maori:	7773	Turkmen:	8475
Estonian:	6984	Marathi:	7782	Twi:	8487
Faroese:	7079	Moldavian:	7779	Ukrainian:	8575
Fiji:	7074	Mongolian:	7778	Urdu:	8582
Finnish:	7073	Nauru:	7865	Uzbek:	8590
French:	7082	Nepali:	7869	Vietnamese:	8673
Frisian:	7089	Norwegian:	7879	Volapük:	8679
Galician:	7176	Oriya:	7982	Welsh:	6789
Georgian:	7565	Pashto, Pushto:	8083	Wolof:	8779
German:	6869	Persian:	7065	Xhosa:	8872
Greek:	6976	Polish:	8076	Yiddish:	7473
Greenlandic:	7576	Portuguese:	8084	Yoruba:	8979
Guarani:	7178	Punjabi:	8065	Zulu:	9085
		Quechua:	8185		

"AVCHD" is a trademark of Panasonic Corporation and Sony Corporation.

Java is a registered trademark of Oracle and/or its affiliates.

Manufactured under license from Dolby Laboratories.
Dolby and the double-D symbol are trademarks of Dolby Laboratories.

For DTS patents, see http://patents.dts.com. Manufactured under license from DTS Licensing Limited. DTS, DTS-HD, the Symbol, & DTS and the Symbol together are registered trademarks, and DTS-HD Master Audio is a trademark of DTS, Inc. © DTS, Inc. All Rights Reserved.

HDMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

This product is licensed under the AVC patent portfolio license and VC-1 patent portfolio license for the personal and non-commercial use of a consumer to (i) encode video in compliance with the AVC Standard and VC-1 Standard ("AVC/VC-1 Video") and/or (ii) decode AVC/VC-1 Video that was encoded by a consumer engaged in a personal and non-commercial activity and/or was obtained from a video provider licensed to provide AVC/VC-1 Video. No license is granted or shall be implied for any other use. Additional information may be obtained from MPEG LA, LLC.
See http://www.mpegla.com.

MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.

"DVD Logo" is a trademark of DVD Format/Logo Licensing Corporation.

The Wi-Fi CERTIFIED™ Logo is a certification mark of Wi-Fi Alliance®.
The Wi-Fi Protected Setup™ Identifier mark is a certification mark of Wi-Fi Alliance®.

"Wi-Fi®" and "Wi-Fi Direct®" are registered trademarks of Wi-Fi Alliance®.
"Wi-Fi Protected Setup™", "Miracast™", "WPA™", and "WPA2™" are trademarks of Wi-Fi Alliance®.

DLNA, the DLNA Logo and DLNA CERTIFIED are trademarks, service marks, or certification marks of the Digital Living Network Alliance.

Windows is a trademark or a registered trademark of Microsoft Corporation in the United States and other countries.

Android is a trademark of Google Inc.

Copyright 2004-2014 Verance Corporation. Cinavia™ is a Verance Corporation trademark. Protected by U.S. Patent 7,369,677 and worldwide patents issued and pending under license from Verance Corporation. All rights reserved.

This product incorporates the following software:
(1) the software developed independently by or for Panasonic Corporation,
(2) the software owned by third party and licensed to Panasonic Corporation,
(3) the software licensed under the GNU General Public License, Version 2.0 (GPL V2.0),
(4) the software licensed under the GNU LESSER General Public License, Version 2.1 (LGPL V2.1), and/or
(5) open source software other than the software licensed under the GPL V2.0 and/or LGPL V2.1.

The software categorized as (3) - (5) are distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY, without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. Please refer to the detailed terms and conditions thereof shown in the Player Settings menu.

At least three (3) years from delivery of this product, Panasonic will give to any third party who contacts us at the contact information provided below, for a charge no more than our cost of physically performing source code distribution, a complete machine-readable copy of the corresponding source code covered under GPL V2.0, LGPL V2.1 or the other licenses with the obligation to do so, as well as the respective copyright notice thereof.

Contact Information: oss-cd-request@gg.jp.panasonic.com

The source code and the copyright notice are also available for free in our website below.

http://panasonic.net/avc/oss/

David M. Gay's dtoa and strtod license

The author of this software is David M. Gay.

Copyright (c) 1991, 2000, 2001 by Lucent Technologies.

Permission to use, copy, modify, and distribute this software for any purpose without fee is hereby granted, provided that this entire notice is included in all copies of any software which is or includes a copy or modification of this software and in all copies of the supporting documentation for such software.

THIS SOFTWARE IS BEING PROVIDED "AS IS", WITHOUT ANY EXPRESS OR IMPLIED WARRANTY. IN PARTICULAR, NEITHER THE AUTHOR NOR LUCENT MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND CONCERNING THE MERCHANTABILITY OF THIS SOFTWARE OR ITS FITNESS FOR ANY PARTICULAR PURPOSE.

"UNICODE, INC. LICENSE AGREEMENT - DATA FILES AND SOFTWARE

Unicode Data Files include all data files under the directories http://www.unicode.org/Public/, http://www.unicode.org/reports/, and http://www.unicode.org/cldr/data/.
Unicode Software includes any source code published in the Unicode Standard or under the directories http://www.unicode.org/Public/, http://www.unicode.org/reports/, and http://www.unicode.org/cldr/data/.

NOTICE TO USER: Carefully read the following legal agreement. BY DOWNLOADING, INSTALLING, COPYING OR OTHERWISE USING UNICODE INC.'S DATA FILES (""DATA FILES""), AND/OR SOFTWARE (""SOFTWARE""), YOU UNEQUIVOCALLY ACCEPT, AND AGREE TO BE BOUND BY, ALL OF THE TERMS AND CONDITIONS OF THIS AGREEMENT. IF YOU DO NOT AGREE, DO NOT DOWNLOAD, INSTALL, COPY, DISTRIBUTE OR USE THE DATA FILES OR SOFTWARE.

COPYRIGHT AND PERMISSION NOTICE

Copyright (c) 1991-2009 Unicode, Inc. All rights reserved. Distributed under the Terms of Use in http://www.unicode.org/copyright.html.
Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the ""Data Files"") or Unicode software and any associated documentation (the ""Software"") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that (a) the above copyright notice(s) and this permission notice appear with all copies of the Data Files or Software, (b) both the above copyright notice(s) and this permission notice appear in associated documentation, and (c) there is clear notice in each modified Data File or in the Software as well as in the documentation associated with the Data File(s) or Software that the data or software has been modified.

THE DATA FILES AND SOFTWARE ARE PROVIDED ““AS IS””, WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.”

---

(1) MS/WMA
This product is protected by certain intellectual property rights of Microsoft Corporation and third parties. Use or distribution of such technology outside of this product is prohibited without a license from Microsoft or an authorized Microsoft subsidiary and third parties.

(2) MS/PlayReady/Final Product Labeling
This product contains technology subject to certain intellectual property rights of Microsoft. Use or distribution of this technology outside of this product is prohibited without the appropriate license(s) from Microsoft.

(3) MS/PlayReady/End User Notices
Content owners use Microsoft PlayReady™ content access technology to protect their intellectual property, including copyrighted content. This device uses PlayReady technology to access PlayReady-protected content and/or WMDRM-protected content. If the device fails to properly enforce restrictions on content usage, content owners may require Microsoft to revoke the device’s ability to consume PlayReady-protected content. Revocation should not affect unprotected content or content protected by other content access technologies. Content owners may require you to upgrade PlayReady to access their content. If you decline an upgrade, you will not be able to access content that requires the upgrade.

(4) FLAC, WPA Supplicant
The software licenses are displayed when “Software Licence” in the Setup menu is selected. (⇨ 29)

NORSK

ADVARSEL

Produkt
For å redusere faren for brann, elektrisk støt eller skade på apparatet:
- Utsett ikke produktet for regn, fukt, drypping eller sprut.
- Ikke plasser objekter som er fylt med væske, som vaser, på apparatet.
- Bruk kun anbefalt tilbehør.
- Fjern ikke deksler.
- Reparer ikke denne enheten selv, overlat service til kvalifisert servicepersonell.

Vekselstrømnett
Nettstøpselet er trukket ut fra denne enheten.
Installer denne enheten slik at nettstøpselet umiddelbart kan trekkes fra stikkontakten.

FORSIKTIG

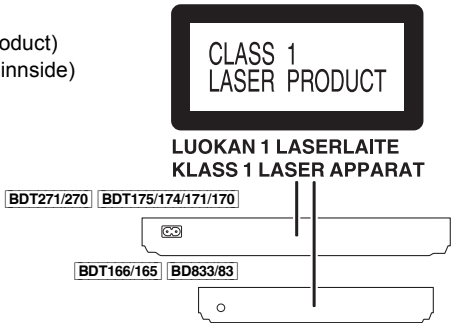
Produkt
- Dette produktet anvender en laser. Betjening av kontroller eller justering eller andre inngrep enn de beskrevet i denne bruksanvisning kan føre til farlig bestråling.
- Plasser ikke åpen ild, slik som levende lys, oppå apparatet.
- Dette apparatet er beregnet for bruk under moderate klimaforhold.

Plassering
For å redusere faren for brann, elektrisk støt eller skade på apparatet:
- Ikke plasser apparatet i en bokhylle, et innebygget kabinett eller et annet lukket sted. Pass på at produktet er godt ventilert.
- Apparatets ventilasjonsåpninger må ikke dekkes til med aviser, duker, gardiner eller lignende.

LASER-spesifikasjon
Klasse 1 LASER-produkt:
Bølgelengde : 790 nm (CD)/660 nm (DVD)/405 nm (BD)
Laserstyrke : Ingen farlig stråling sendes ut

CAUTION –	VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM. FDA 21CFRCLASS II (IIa)
CAUTION –	CLASS 2 VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO THE BEAM. IEC60825-1/CLASS 2
ATTENTION –	RAYONNEMENT LASER VISIBLE ET INVISIBLE,CLASSE 2. EN CAS D'OUVERTURE, NE PAS REGARDER DANS LE FAISCEAU.
FORSIGTIG –	SYNLIG OG USYNLIG LASERSTRÅLING KLASSE 2, NÅR LÅGET ER ÅBENT. UNDGÅ AT SE LIGE IND I STRÅLEN.
VARO –	AVATTAESSA OLET ALTTIINA LUOKAN 2 NÄKYVÄÄ JA NÄKYMÄTÖNTÄ LASERSÄTEILYÄ. ÄLÄ TUIJOTA SÄTEESEEN.
VARNING –	KLASS 2 SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD, STIRRA EJ IN I STRÅLEN.
VORSICHT –	SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG KLASSE 2, WENN ABDECKUNG GEÖFFNET, NICHT IN DEN STRAHL BLICKEN.
注意 –	打开时有可见及不可见激光辐射。避免光束照射。
注意 –	ここを開くとクラス2の可視及び不可視レーザ放射が出る ビームをのぞき込まないこと VQL2P54

(Inside of product)
(Produktets innside)



Manufactured by: Panasonic Corporation
Kadoma, Osaka, Japan
Importer for Europe: Panasonic Marketing Europe GmbH
Panasonic Testing Centre
Winsbergring 15, 22525 Hamburg, Germany

EU

Panasonic Corporation
Web Site: http://panasonic.net

© Panasonic Corporation 2015

En
SQW0277
F0115WY0